BRUHAT BANGALORE MAHANAGARA PALIKE, YELAHANKA ZONE

Executive Engineeer, Byatarayanapura Division, B.B.M.P., Bangalore - 92

P2

BILL OF QUANTIES (BOQ) for Package-2, includes 3 works of Rs.100.00 lakhs

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
1	758.4	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)	Cum	186.92	Rupees One Hundred Eighty Six and Ninety Two Paise Only
2	1925.77	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)	Sqm	80.56	Rupees Eighty and Fifty Six Paise Only
3	695.48	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)	Sqm	665.68	Rupees Six Hundred Sixty Five and Sixty Eight Paise Only
4	280.07	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)	Cum	5348.76	Rupees Five Thousand Three Hundred Forty Eight and Seventy Six Paise Only
5	60.6	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specifcation No. KBS 4.6.2 (P.No.15, I.No.4.28 of PW, P&IWTD SR 2016-17)	Sqm	244.86	Rupees Two Hundred Forty Four and Eighty Six Paise Only
6	484.8	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.15, I.No.4.31 of PW,P&IWTD SR 2016-17)	Sqm	310.58	Rupees Three Hundred Ten and Fifty Eight Paise Only
7	63.63	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabricaton charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTD SR 2016-17)	Cum	6231.74	Rupees Six Thousand Two Hundred Thirty One and Seventy Four Paise Only
8	2.87	KSRB - 4.9.2: Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTD SR 2016-17)	Tonne	73691.2	Rupees Seventy Three Thousand Six Hundred Ninety One and Twenty Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
	25.2	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	5317	Rupees Five Thousand Three Hundred Seventeen Only
10	1081.68	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)	Cum	148.76	Rupees One Hundred Forty Eight and Seventy Six Paise Only
11	915.59	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)	Cum	1768.08	Rupees One Thousand Seven Hundred Sixty Eight and Eight Paise Only
12	3874.7	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)	Sqm	29.68	Rupees Twenty Nine and Sixty Eight Paise Only
13	850.3	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17)	Sqm	3.18	Rupees Three and Eighteen Paise Only
14	4885	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)	Sqm	12.72	Rupees Twelve and Seventy Two Paise Only
15	8	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)	Cum	7036.28	Rupees Seven Thousand Thirty Six and Twenty Eight Paise Only

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16	189	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)	Cum	8013.6	Rupees Eight Thousand Thirteen and Sixty Paise Only
17	171	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)	Sqm	542.72	Rupees Five Hundred Forty Two and Seventy Two Paise Only
18	13.44	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)	Cum	4438.22	Rupees Four Thousand Four Hundred Thirty Eight and Twenty Two Paise Only
19	22.4	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17)	Sqm	102.82	Rupees One Hundred Two and Eighty Two Paise Only
20	1.68	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)	Cum	5767.46	Rupees Five Thousand Seven Hundred Sixty Seven and Forty Six Paise Only
21	181.8	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	Sqm	1817	Rupees One Thousand Eight Hundred Seventeen Only

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22	169.1	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine	Cum	6217.96	Rupees Six Thousand Two Hundred Seventeen and Ninety Six Paise Only
23	1691	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTD SR 2016-17)	Sqm	95.4	Rupees Ninety Five and Forty Paise Only
24	74.24	KSRRB M2100-1.1. Earth work in excavation for foundation of structures such as culverts, bridges etc., as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications I. Ordinary soil - A. Manual Means (i) Depth upto 3m MORTH Specification No. 304(P.No.209, I.No.27.1 of PW,P&IWTD S.R 2015-16))	cum	230.38	Rupees Two Hundred Thirty and Thirty Eight Paise Only
25	13.92	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift, complete as per specifications, specification. No. KBS (P.No.6, I.No.2.15 of PW,P&IWTD S.R 2016-17))	Cum	2240.84	Rupees Two Thousand Two Hundred Forty and Eighty Four Paise Only
26	5.52	KSRRB M2100-13. Plain / Reinforced Cement Concrete M15 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.84cum and fine aggregates @ 0.56cum in Open Foundation complete as per Drawing and Technical Specifications MORTH Specification No. 1500,1700 & 2100.(P.No.211, I.No.27.24 of PW,P&IWTD S.R 2016-17)	Cum	6017.76	Rupees Six Thousand Seventeen and Seventy Six Paise Only
27	10.2	Diversion of water course by providing Coffer dams or bunds or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complete.(beyond 1.50 mtrs depth upto & including 3m)(P.No.257, I.No.37.41.2 of PW,P&IWTD S.R 2016-17)	Cum	349.8	Rupees Three Hundred Forty Nine and Eighty Paise Only
28	12.248	KSRRB M2100-20.2. Plain / Reinforced Cement Concrete in Open Foundation with OPC cement design mix M35 @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @0.68cum and fine aggregates @ 0.45cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008. case II : With Batching Plant, Transit Mixer and Concrete Pump MORTH Specification No. 1500,1700 & 2100(P.No.213, I.No.27.37 of PW,P&IWTD S.R 2016-17)	Cum	6838.06	Rupees Six Thousand Eight Hundred Thirty Eight and Six Paise Only

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
[redacted]	21.584	KSRRB M2200-5.19. Design mix M35 with OPC cement @ 390kgs,with 20mm and down size graded granite metal coarse aggregates @0.68cum and fine aggregates @ 0.45cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 - ii) For height, upto 5m,(P.No.214, I.No.28.7.18 of PW,P&IWTD S.R S.R 2016-17)	Cum	7703.02	Rupees Seven Thousand Seven Hundred Three and Two Paise Only
30	3.7215	KSRRB M2200- TMT/MS Bar Reinforcement KSRRB M2200-6. Supplying, fitting and placing TMT bar reinforcement in sub-structure complete as per drawing and Technical Specifications complete as per specificationsMORTH Specification No.1600 & 2200 - TMT Bars Fe 500	Tonne	58090.12	Rupees Fifty Eight Thousand Ninety and Twelve Paise Only

Assistant Engineer
Ward no. 06

Executive Engineer
Byatarayanapura Division

Assistant Executive Engineer
Byatarayanapura sub Division

Chief Engineer
Yelahanka Zone